RADFORD AREA INCLUDING FAIRLAWN 2020 TRANSPORTATION PLAN

Developed by the Transportation Planning Division

Of the

Virginia Department of Transportation

In Cooperation With

The U.S. Department Of Transportation, Federal Highway Administration,

The City of Radford,
Pulaski and Montgomery Counties

December 2001

This report does not constitute a standard specification, regulation or provide a funding mechanism for the included transportation recommendations.

INTRODUCTION

The Radford Area including Fairlawn 2020 Transportation Plan was developed as a joint effort between the Virginia Department of Transportation (VDOT), the City of Radford, Pulaski County and Montgomery County. The purpose of this study was to evaluate the existing transportation system and future demand in the "Study Area" and to recommend a set of transportation improvements that could best meet existing and future transportation infrastructure needs. The Study Area for this plan includes the City of Radford, the Fairlawn community area in Pulaski County, and a portion of Montgomery County.

Improved transportation systems are vital to Virginia's and to the local area's economic growth and development. Providing effective, safe, and efficient movement of people and goods is a basic goal of VDOT's transportation program. This guiding principle, together with consideration of environmental issues and local mobility needs, was the basis for the development of this transportation plan.

VDOT will use this plan when evaluating requests from the local governments for specific transportation projects and/or implementing projects that VDOT initiates. This list of recommendations will also be used in the statewide transportation planning process so that the magnitude of transportation needs statewide can be more accurately quantified.

STUDY AREA AND THOROUGHFARE SYSTEM

The Study Area is at the heart of the New River Valley. The Study Area is located adjacent to I-81 approximately 47 miles northeast of Roanoke, Virginia. Major roadways in the Study Area include US 11, I-81, VA 114, VA 177, and VA 232. The thoroughfare system consists of approximately 38 miles of roadway within the Study Area. The Study Area's boundary encompasses 21 square miles (Radford City portion: 11 square miles, Fairlawn area portion: 4 square miles, Montgomery County portion: 6 square miles).

The Study Area for the Radford Area including Fairlawn 2020 Transportation Plan was established based on boundaries used in the 2010 Transportation Plan with the addition of the area surrounding the I-81/VA 177 (Tyler Road) interchange. Within this boundary line (commonly called a cordon line), a set of specific roadways was selected and designated as the urban thoroughfares. The analysis and recommendations were limited to these urban thoroughfares and any new facilities recommended in this study.

Thoroughfares are defined as facilities that operate as arterials or collector routes. The distinction between functional classifications (arterial, collector, local street) is based on whether the facility primarily serves "through-traffic" or provides direct access to adjacent land. Thoroughfare roadways in cities and towns with populations over 5,000 have an "urban" designation and those in cities and towns with populations less than 5,000 are designated "rural".

Roadways not classified by this system, but deemed important by local governments, may be in the 2020 Transportation Plan as "non-thoroughfare" roadways. Typically, these are planned roadways or improvements that will be built with funds (public or private) other than VDOT funds.

DEMOGRAPHIC OVERVIEW

Between 1970 and 1980, the population of the Study Area experienced steady gains before stabilizing in the 1990's. The City of Radford had approximately 15,940 in population in 1990, the Fairlawn area was approximately 2,639, and the Montgomery County portion of the study area was 946, for an estimated 19,525 residents for the entire Study Area. Growth in the City of Radford exceeded past projections primarily due to two annexations, the enrollment growth of Radford University, and relocation rather than natural increase. Based on the 2000 Census, the City of Radford population was 15,859. The Fairlawn area population was approximately 2,590, and the Montgomery County portion of the Study Area was approximately 1,172, making an estimated total population of 19,621 for the entire Study Area.

The City of Radford's economy is partially based on the health and vitality of the textile, automotive, castings, and electronic motor industries, which at this time are experiencing moderate growth. Radford University has helped to stabilize the local economy with their steady growth over the last several years. Economic growth is also occurring in the Pulaski and Montgomery County portions of the Study Area. The Fairlawn area has seen new developments in retail trade in the past decade and the Radford Regional Hospital has just recently relocated to Montgomery County near the VA 177 (Tyler Road) exit off I-81.

SUMMARY OF APPROACH AND ANALYSIS METHODS

The development of the transportation plan followed a process that included data collection, review, and analysis. The data collected included information such as traffic counts, police accident reports, roadway geometric inventory data, bridge structural inspection reports, at-grade railroad crossing geometric data, tourism surveys, and goods movement surveys. Review and analysis of this data was combined with a review and analysis of previous transportation and landuse plans and other studies. Furthermore, meetings were held with local staff throughout the study process to gather additional input.

TRANSPORTATION RECOMMENDATIONS

Transportation recommendations are included in the plan as phased recommendations or other recommendations.

Phased recommendations are generally improvements to the VDOT-maintained roadway system and have been phased to establish a basis for prioritization. Phased recommendations are divided into three phases. Phase One recommendations are base year improvements intended to address the most immediate needs of the Study Area. Phase Two recommendations are interim study year (2010) improvements. Typically, these improvements are not needed in the immediate future. However, planning and budgeting for their future implementation may allow them to be in place for the interim study year of 2010. Phase Three recommendations are long-term (2020) improvements that do not have an immediate or short-term need. However, in the long-term, as traffic grows and existing facilities age, their importance will become more apparent. Long-term recommended improvements may also be re-evaluated as this plan is updated to determine if the need for their implementation has been met, or whether they should be deferred into the future again when their need may develop. In some instances, long-term recommended improvements may be removed from the transportation planning effort if their need does not develop or if other circumstances cause a change of priorities in the Study Area.

Other recommendations focus on parking, bicycle/pedestrian facilities, intercity rail, intercity bus, air travel, transit, paratransit, taxi, and goods movement and may include areas of special concern. These items are not typically funded as part of the urban transportation plan, but may include components addressed by any of the phased recommendations.

RADFORD PHASED RECOMMENDATIONS

PHASE ONE: BASE YEAR (2001) RECOMMENDATIONS

Roadway Improvements

- Reconstruct US 11 (E Main Street) to urban 2-lane standards including sidewalks and bike lanes from Whitehall Street to 0.12 miles east of Robey Street.
- Reconstruct 2nd Avenue to urban 2-lane standards including sidewalks and bike lanes from Sundell Drive/Park Road to Miller Street.
- Add 2nd Avenue Extended as part of the thoroughfare system while Park Road remains one-way from Park Road to 2nd Avenue. Currently 2nd Avenue Extended is part of a one-way pair with Park Road.
- Reconstruct Park Road to urban 2-lane standards including sidewalks and bike lanes from Scott Street to 2nd
 Avenue.
- Reconstruct Rock Road to urban 2-lane standards from VA 177 (Tyler Avenue) to the Radford east corporate limits with realignment at Auburn Avenue. This project will include sidewalks and bike lanes.
- Reconstruct Scott Street to urban 2-lane standards including sidewalks and bike lanes from 7th Street to Park Road.
- Widen Wadsworth Street to urban 4-lane standards including sidewalks and bike lanes from Rock Road to Sundell Drive. This will improve north/south access from/to VA 232 (W Main Street) and Rock Road.

PHASE TWO: INTERIM YEAR (2010) RECOMMENDATIONS

Roadway Improvements

• Reconstruct US 11 (E Main Street) to urban 2-lane standards including sidewalks and bike lanes from 0.12 miles east of Robey Street to the Radford east corporate limits.

Intersection Improvements

 VA 232 (W Main Street) at Walker Street – Improve signal phasing after construction is complete on the new Memorial Bridge.

PHASE THREE: STUDY YEAR (2020) RECOMMENDATIONS

Roadway Improvements

- Reconstruct VA 232 (W Main Street) to include a sidewalk on the east side from Rock Road to Highland Avenue.
- Reconstruct Forest Avenue to urban 2-lane standards including sidewalks and bike lanes from VA 232 (W Main Street) to Rock Road.
- Reconstruct Park Road to urban 2-lane standards including sidewalks and bike lanes from 2nd Avenue to Rock Road.
- Widen Rock Road to urban 4-lane standards to include sidewalks and bike lanes from Wadsworth Street to VA 177 (Tyler Avenue).
- Construct a new urban 2-lane standard connector including sidewalks and bike lanes from Park Road to VA 177 (Tyler Avenue). This will provide an alternate east/west access from/to Park Road and VA 177 (Tyler Avenue).
- Construct a new urban 2-lane standard connector including sidewalks and bike lanes from VA 177 (Tyler Avenue) to US 11 (E Main Street). This will provide an alternate east/west access from/to VA 177 (Tyler Avenue) and US 11 (E Main Street).

FAIRLAWN AREA PHASED RECOMMENDATIONS

PHASE ONE: BASE YEAR (2001) RECOMMENDATIONS

Intersection Improvements

- US 11 (Lee Highway) at VA 114 (Peppers Ferry Boulevard) Add double left-turn lanes from southbound US 11 (Lee Highway) to eastbound VA 114 (Peppers Ferry Boulevard) and from westbound VA 114 (Peppers Ferry Boulevard) to southbound US 11 (Lee Highway).
- US 11 (Lee Highway) at Rte 600 (Belspring Road) Prohibit Rte 600 (Belspring Road) southbound traffic from turning onto US 11 (Lee Highway).

PHASE TWO: INTERIM YEAR (2010) RECOMMENDATIONS

Roadway Improvements

- Widen US 11 (Lee Highway) to rural 6-lane divided standards including sidewalks and bike lanes from VA 114 (Peppers Ferry Boulevard) to the new Memorial Bridge.
- Widen VA 114 (Peppers Ferry Boulevard) to rural 6-lane divided standards including sidewalks from US 11 (Lee Highway) to 0.31 miles east of Rte 600 (Belspring Road).
- Reconstruct Rte 624 (New River Road) to rural 2-lane standards from US 11 (Lee Highway) to Rte 798 (Falling Branch Road).
- Reconstruct Rte 626 (Hazel Hollow Road) to rural 2-lane standards from US 11 (Lee Highway) to Rte 798 (Falling Branch Road).
- Reconstruct Rte 798 (Falling Branch Road) to rural 2-lane standards from Rte 624 (New River Road) to Rte 626 (Hazel Hollow Road).

Intersection Improvements

VA 114 (Peppers Ferry Boulevard) at Old Peppers Ferry Loop – Improve intersection geometry and sight distance.

PHASE THREE: STUDY YEAR (2020) RECOMMENDATIONS

Roadway Improvements

- Reconstruct Rte 600 (Belspring Road) to rural 2-lane standards including bike lanes from VA 114 (Peppers Ferry Boulevard) to the north study area boundary.
- Reconstruct Rte 624 (Hickman Cemetery Road) to rural 2-lane standards from US 11 (Lee Highway) to 0.40 miles north of US 11 (Lee Highway) including realignment with Rte 624 (New River Road) south of US 11 (Lee Highway).

MONTGOMERY COUNTY AREA PHASED RECOMMENDATIONS

PHASE ONE: BASE YEAR (2001) RECOMMENDATIONS

Roadway Improvements

• Reconstruct Rte 688 (Rock Road) to rural 2-lane standards including bike lanes from US 11 (Radford Road) to the Radford east corporate limits.

Intersection Improvements

• US 11 (Radford Road) at Rte 688 (Rock Road) – Provide exclusive left and right-turn lanes on US 11 (Radford Road) and Rte 688 (Rock Road) in conjunction with the reconstruction of Rte 688 (Rock Road) and US 11 (Radford Road).

PHASE TWO: INTERIM YEAR (2010) RECOMMENDATIONS

Roadway Improvements

- Reconstruct US 11 (Radford Road) to urban 2-lane standards including bike lanes from the Radford east corporate limits to Rte 688 (Rock Road).
- Widen US 11 (Radford Road) to rural 4-lane divided standards including bike lanes from Rte 688 (Rock Road) to Rte 663 (Walton Road).
- Reconstruct Rte 600 (Tyler Road) to rural 4-lane divided standards with left turn lanes at Rte 627 (Barns Road) and the New River Valley Medical Center entrance including bike lanes from I-81 to the New River Valley Medical Center entrance.

PHASE THREE: STUDY YEAR (2020) RECOMMENDATIONS

There were no long-term improvements identified for the Montgomery County Area.

OTHER RECOMMENDATIONS

Parking and Modal Infrastructure

There is no major lack of parking for the local businesses and residents in the Study Area. Most businesses have adequate off-street parking space available. In support of the modal connections between the single occupancy vehicle, ridesharing, public transit, and passenger rail, it is recommended that adequate infrastructure be incorporated as these modes and programs are developed. The type of infrastructure that should be consider would include but not be limited to park-and-ride lots, curb cuts and shelters for bus stops, and rail station facilities.

Bicycle/Pedestrian

With the cooperation of the City of Radford, Pulaski County, Montgomery County, and the New River Valley Planning District Commission, a network of bikeways and walkways was developed for this plan. These bikeway/walkway facilities were based on a bicycle plan developed by the New River Valley Planning District Commission in 1993 and the 1999 Master Plan prepared by the City of Radford. Adjustments were made to improve the connectivity between the two

plans and to provide what was felt to be the most acceptable between all jurisdictions. Key elements of this bikeway/walkway plan are included in the 2020 Transportation Plan roadway recommendations. This plan includes basic bicycle/pedestrian transportation facilities linking the major tourist, shopping, and employment areas which are projected to produce bicycle/pedestrian traffic within or adjacent to the Study Area.

Intercity Rail

The nearest intercity rail stop (un-staffed) is in Hinton, West Virginia (82 miles north) on the east-west rail route. A full service station on the same line is located in Prince, West Virginia (99 miles north). Nearest direct access to the north-south line is at Lynchburg, Virginia (102 miles southeast). No formal plans for establishing rail passenger service have been announced in the region. However, feasibility studies conducted by the Virginia Department of Rail and Public Transportation in 1994 and 1997 have investigated initiation of rail passenger service between Bristol, Richmond, and Washington D.C., that included a proposed station in Radford. It is recommended that the City of Radford support any plans that may be formalized to establish rail passenger service in the region. No additional enhancements to intercity rail service are proposed at this time.

Intercity Bus

The study area is currently not served by intercity bus. Greyhound Lines bus service is located just outside the study area in Christiansburg, Virginia (16 miles east) and Pulaski, Virginia (15 miles west), and provides regularly scheduled access to transfers nationwide. No enhancements are recommended at this time.

Air Travel

Commercial Service

Commercial flights from two regional airports within 90 miles connect the Study Area with major hubs across the country. Commercial air passenger service is available at Roanoke Regional Airport (46 miles northeast by I-81); and Greenbrier Valley Airport in Lewisburg, West Virginia (88 miles north by US 11, VA 100, and US 219). Airfreight and charter services are available at each of these airports.

General Aviation

The closest general aviation facilities are available at the New River Valley Airport located in Dublin, Virginia. The airport is located 8 miles west of the study area along US 11.

Because of insufficient demand for services in the vicinity of the Study Area no improvements to air travel are recommended at this time.

Transit, Paratransit, Ridesharing, and Taxi

The Study Area currently is not served by any mass transit. The Study Area has Paratransit provisions through the New River Valley (NRV) Senior Service, a provider of transportation service to elderly persons and persons with disabilities in the New River Valley. There is interest in extending the Two Town Trolley now run by Blacksburg Transit between Blacksburg and Christiansburg to the City of Radford. This would tie Radford University with Virginia Tech and would provide a viable transportation alternative for those living in the Radford and Fairlawn communities. The City of Radford has also noted interest in developing a trolley system in their comprehensive plan. Pulaski County will consider the implementation of public transportation in Fairlawn and the remainder of the county as economic, demographic and/or environmental conditions change to make such service feasible. The City of Radford has expressed interest in the development and support of a regional rideshare program. It is recommended that he City of Radford coordinate with the New River Valley Planning District Commission to study the feasibility and possible funding source for this program.

Goods Movement

Roadway freight shipment moving through the Study Area tends to use mainly I-81, US 11, VA 114, VA 177, VA 232, and Rock Road. VA 177 and VA 232 provide access to I-81, the major truck route in southwestern Virginia. No thoroughfare roadways are adversely impacted by high levels of truck traffic. Several roadway segments that were identified as having some impedance to the movement of truck traffic are being recommended for improvements. The rail freight line that traverses through the Study Area does not have any major conflicts with vehicular traffic on the thoroughfare system.

Tourism

The Radford Study Area is host to many tourist attractions. The City of Radford's traditional downtown has a number of shops, restaurants and a movie theatre. Radford University with 9,100 students has many sporting events and educational events. Wildwood Park is a 50 acre wooded valley inside the City of Radford and Claytor Lake in Pulaski County just south of the study area is a 4,500 acre State Park. There are currently no parking, pedestrian, or capacity-related problems identified that would limit tourist activity, therefore no improvements are recommended in these areas. There are several thoroughfare recommendations that include bicycle facility improvements that address improving bicycle access to many of these attractions.

LOCAL PROJECTS¹

The following local roadways have been identified for improvement. Although outside the jurisdiction of the VDOT thoroughfare roadway system, they are listed to provide continuity and consistency between local plans and VDOT plans.

Radford

- Reconstruct Scott Street to urban 2-lane standards including bike lanes from 7th Street to 6th Street. The
 recommendation will be consistent with recommended thoroughfare improvements on Scott Street from 7th Street to
 Park Road. (Year 2001)
- Construct a new 2-lane bridge (with bike lanes in both directions) over the Norfolk Southern railway near Harrison Street connecting US 11 (E Main Street) and West Street. This bridge will replace the Harrison Street at-grade crossing of the railway. (Year 2010)
- Reconstruct Wintergreen Drive to urban 2-lane standards including bike lanes from Rock Road to the Radford south corporate limits. The recommendation will be consistent with recommended improvements on Rte 787 (Wintergreen Drive) in Montgomery County. (Year 2020)

Fairlawn Area

 Reconstruct Nicewander Way and build a new connector roadway including sidewalks from US 11 (Lee Highway) to Madison Street. This will provide an alternate route following the closure of Rte 715 (Madison Street) at US 11 (Lee Highway). (Year 2010)

Montgomery County Area

- Reconstruct Rte 600 (Mud Pike Road) to rural 2-lane standards including bike lanes from VA 177 (Tyler Road) to Rte 666 (Mud Pike Road). (Year 2010)
- Reconstruct Rte 627 (Barns Road) to rural 2-lane standards including bike lanes from Rte 600 (Tyler Road) to Rte 658 (Meadow Creek Road). (Year 2010)
- Reconstruct Rte 600 (Fire Tower Road) to rural 2-lane standards including bike lanes from Rte 666 (Mud Pike Road) to 0.40 miles north of Rte 666 (Mud Pike Road). (Year 2020)
- Reconstruct Rte 664 (Lovely Mount Drive) to rural 2-lane standards including bike lanes from VA 177 (Tyler Road) to Rte 787 (Wintergreen Drive). (Year 2020)
- Reconstruct Rte 787 (Wintergreen Drive) to rural 2-lane standards including bike lanes from the Radford south corporate limits to Rte 664 (Lovely Mount Drive). (Year 2020)

ENVIRONMENTAL OVERVIEW

An environmental overview was conducted for the Study Area thoroughfare roadway recommendations that included widening (providing additional travel lanes) or development of new roadway facilities. The purpose of the environmental overview was to review the environmental impacts of the proposed recommendations, identifying major impacts that would preclude their implementation. To conduct the environmental overview, secondary data from VDOT and other

¹ Local recommendations are included for information purposes only and are not necessarily supported by VDOT.

readily available sources was used. Information on the environmental overview methodology can be found in the Radford Area including Fairlawn 2020 Transportation Plan Technical Report. The following is a brief summary of potential environmental impacts:

- Stream crossings were identified for the widening of US 11 (Radford Road) and Rock Road.
- Wetland impacts were identified for the widening of US 11 (Lee Highway) and VA 114 (Peppers Ferry Boulevard).
- Business and/or residential relocations could occur for the widening of US 11 (Lee Highway), US 11 (Radford Road),
 VA 114 (Peppers Ferry Road), Rte 600 (Tyler Road), Rock Road, and Wadsworth Street.

These estimates are intended to represent the worst-case scenario of impacts. Further evaluation of environmental impacts resulting from each of these recommendations should occur once they are developed in more detail. Local projects included in this plan are for information purposes only and are not necessarily supported by VDOT. Therefore, they were not reviewed as part of the environmental overview. There were no additional environmental features identified at this time that would preclude implementation of any of the recommendations.

LOCAL COORDINATION AND CITIZEN PARTICIPATION

The development of the Radford Area including Fairlawn 2020 Transportation Plan included several coordination meetings with local staff, and a public meeting held with VDOT representatives, local officials and residents from the Study Area.

The coordination meetings consisted of a kick-off meeting, an existing conditions meeting and a draft recommendations meeting. The kick-off meeting, held in July 2000, enabled the project team to discuss with local staff the purpose and scope of the study, the schedule for data collection and plan preparation and the coordination process. The second meeting (existing conditions), held in April 2001, allowed the project team to present the results of baseline and horizon year traffic analysis and also allowed local staff to communicate desired transportation needs. Finally, at the draft recommendations meeting, held in July 2001, the project team presented and discussed with local officials the draft 2020 Transportation Plan recommendations. From these recommendations, local staff provided input that was then used to draft the final recommendations.

After the series of coordination meetings, a public meeting was held at the Radford City Municipal Building on October 22, 2001. The purpose of this meeting was to present the recommendations to local officials, citizens, and other interested parties, to receive comments on the plan, and to allow the Radford City Council to consider adopting the plan.

PLAN ADOPTION

The Small Urban Area Transportation Plan for the Radford Area including Fairlawn was adopted by the Radford City Council on December 17, 2001.

ADDITIONAL INFORMATION

More details on the development of the Radford Area including Fairlawn 2020 Transportation Plan and the study recommendations are available in the Radford Area including Fairlawn 2020 Transportation Plan Technical Report and at the Radford Area including Fairlawn 2020 Transportation Plan website, http://www.vdoturbanplans.com/Radford.htm. Copies of the Technical Report are located at the main libraries and municipal buildings in the jurisdictions represented in this plan. They are also available for review at the VDOT Transportation Planning Division at the central office in Richmond, Virginia, at the VDOT Salem District office in Salem, Virginia, and at the Residency office in Christiansburg, Virginia.

Projects included in the Virginia Transportation Development Plan (VTDP) are not part of this recommendations package. The VTDP can be reviewed online at VDOT's website, http://www.virginiadot.org.

Information on VTDP projects for the Study Area can also be found by contacting the VDOT Resident Engineer at the Christiansburg Residency office in Christiansburg, Virginia, (540-381-7200).

RADFORD AREA INCI LIDING FAIRLAWN TRANSPORTATION RECOMMENDATIONS²

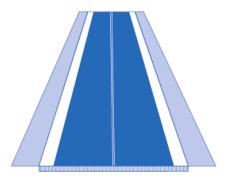
Value	ı	RADFORD AREA INCLUDING FAIRLAWN TRANSPORTATION RECOMMENDATIONS ²											
Route Rout						Segment		Cont	Typical	Typical		(ADT)	1
Second		Route #	Route Name	From	То								Year 2020
2" Ave Ex Park Rd		US 11	E Main St		0.12 ME Robey St	0.21	including sidewalks/bike lanes	1,028,500	R2 (28')	U2 (30')	6,220	7,100	8,100
27" Ave Fat			2 nd Ave		Miller St	0.31	including sidewalks/bike lanes	1,518,200	R2 (24')	U2 (30')	5,250	6,300	7,400
Park Bid Sect 81 2" Ave 0.25 Including sidewallskylke larges 1.224.000 R2(21) U2(30) 3.210 3.700 4.28			2 nd Ave Ext	Park Rd	2 nd Ave	0.40	VDOT thoroughfare system	O	R2 (15')	N/A	N/A	N/A	N/A
Rock Rd			Park Rd	Scott St	2 nd Ave	0.25	including sidewalks/bike lanes	1,224,400	R2 (24')	U2 (30')	3,210	3,700	4,200
Scoti St			Rock Rd	· ·	Radford ECL	0.45	including realignment at Auburn Ave including sidewalks/bike lanes	1,836,600	R2 (22')	U2 (30')	2,500	3,300	4,000
Macteworth St Tock Pid Sundell Dr 0.70 Including sidewalks/diskelenses 6,283,500 J2 (287) U4 (481) 5,946 8,080 7,71			Scott St	7 th St	Park Rd	0.07	including sidewalks/bike lanes	342,800	R2 (30')	U2 (30')	3,210	3,700	4,200
Intersection VA 212 Walker St	_		Wadsworth St	Rock Rd	Sundell Dr	0.70	including sidewalks/bike lanes	6,263,300	U2 (26')	U4 (48')	5,940	6,800	7,700
Intersection VA 212 Walker St	Radford	US 11	E Main St	0.12 ME Robey St	Radford ECL	1.24	including sidewalks/bike lanes	5,060,800	R2 (30')	U2 (30')	6,220	7,100	8,100
Variety Vari			Intersection	VA 232			Year 2010 Improve signal phasing after construction is complete on the new					·	
Forest Ave			Improvement	(W Main St)	Walker St			120,000	N/A	N/A	N/A	N/A	N/A
Forest Ave		VA 232	W Main St		Highland Ave	0.61		811,300	R4D (48')	U4D (48')	6,530	7,800	9,100
Park Rid Z*1 Ave Rock Rd 1.16 including sidewalks/bike lanes 5,681,100 R2 (15) U2 (30) 3,210 3,700 4,25 4,			Forest Ave		Rock Rd	1.23	including sidewalks/bike lanes	6,023,900	R2 (30')	U2 (30')	940	1,100	1,200
Rock Rd			Park Rd	2 nd Ave		1.16	including sidewalks/bike lanes	5,681,100	R2 (15')	U2 (30')	3,210	3,700	4,200
Connector			Rock Rd	Wadsworth St	(Tyler Ave)	1.76	including sidewalks/bike lanes	13,123,000	R2 (24')	U4 (48')	5,970	7,800	9,500
Connector (Tyler Ave) (E Main St) 0.80 Including sidewalks/bike lanes 3,265,000 U2 (30) N/A			Connector		(Tyler Ave)	0.60	including sidewalks/bike lanes	2,448,800		U2 (30')	N/A	N/A	N/A
Intersection US 11			Connector	· ·		0.80		3,265,000		U2 (30')	N/A	N/A	N/A
Intersection Intersection Improvement			Intersection	US 11									
Intersection US 11 Rie 600 SB traffic from turning onto US 11 (Lee Hwy) VA 114 (Peppers Ferry Bidd) Va 114			Improvement	(Lee Hwy)	Blvd)			1,250,000	N/A	N/A	N/A	N/A	N/A
US 11 Lee Hwy Blvd) Bridge 0.72 including sidewalks/bike lanes 4,567,700U4F (60) R6D (60') 20,470 26,600 32,70 Peppers Ferry US 11 0.31ME Rte 600 (Belspring Rd) 0.68 including sidewalks/bike lanes 4,567,700U4F (60') R6D (60') 20,470 26,600 32,70 Reppers Ferry US 11 (Lee Hwy) (Belspring Rd) 0.68 including sidewalks/bike lanes 4,567,700U4F (60') R6D (60') 21,000 27,300 33,60 Reppers Ferry US 11 (Falling Branch Reppers Ferry Referry Refe							SB traffic from turning onto US 11 (Lee	50,000	N/A	N/A	N/A	N/A	N/A
Name		US 11		(Peppers Ferry Blvd)	Bridge	0.72	including sidewalks/bike lanes	4,567,700	U4F (60')	R6D (60')	20,470	26,600	32,700
Rite 624 New River Rd US 11		VA 114				0.68		4,044,300	U4F (60')	R6D (60')	21,000	27,300	33,600
Hazel Hollow Hazel Hollow Hazel Hollow Hazel Hollow Ref Hazel Hollow Ref Hazel Hollow Ref	awn Area	Rte 624	New River Rd		(Falling Branch	0.89		1,335,000	R2 (22')	R2 (24')	1,000	1,100	1,200
Rte 798 Rd	Fairla		Rd		(Falling Branch	0.62	Year 2010 Widen to 24 feet	930,000	R2 (20')	R2 (24')	3,140	3,500	3,800
Intersection Improvement Bivd Improvement Improvement Bivd Improvement		Rte 798				0.38	Year 2010 Widen to 24 feet	327,800	R2 (16')	R2 (24')	1,000	1,100	1,200
Rte 600 Belspring Rd Blvd) Area Boundary Area Bounda				(Peppers Ferry Blvd)	1.1			68,000	N/A	N/A	N/A	N/A	N/A
Rte 624 Cemetery Rd (Lee Hwy)		Rte 600		(Peppers Ferry Blvd)	Area Boundary	0.43	lanes	710,100	R2 (22')	R2 (24')	3,600	4,000	4,300
Rte 688 Rock Rd (Radford Rd) Radford ECL 0.99 lanes 2,202,500 R2 (22') R2 (24') 4,210 5,500 6,70 Year 2001 Provide exclusive left and right-turn lanes on US 11 (Radford Rd) and Rte 688 (Rock Rd) Intersection Improvement (Radford Rd) (Rock Rd) (Rock Rd) See Sec Sec Sec Sec Sec Sec Sec Sec Sec		Rte 624		(Lee Hwy)		0.40	realignment with Rte 624 (New River Rd)	600,000	R2 (18')	R2 (24')	1,000	1,100	1,200
Rte 600 Tyler Rd I-81 entrance 0.45 NRV Med Center including bike lanes 1,688,100 R2 (20') R4D (48') 10,000 11,000 12,00	ea	Rte 688	Rock Rd		Radford ECL	0.99	lanes	2,202,500	R2 (22')	R2 (24')	4,210	5,500	6,700
Rte 600 Tyler Rd I-81 entrance 0.45 NRV Med Center including bike lanes 1,688,100 R2 (20') R4D (48') 10,000 11,000 12,00	ounty Ar.						turn lanes on US 11 (Radford Rd) and Rte 688 (Rock Rd)	164,000	N/A	N/A	N/A	N/A	N/A
Rte 600 Tyler Rd I-81 entrance 0.45 NRV Med Center including bike lanes 1,688,100 R2 (20') R4D (48') 10,000 11,000 12,00	ery C	US 11	Radford Rd	Radford ECL		0.35	including sidewalks/bike lanes	1,428,400	R2 (30')	U2 (30')	9,100	10,000	10,900
Rte 600 Tyler Rd I-81 entrance 0.45 NRV Med Center including bike lanes 1,688,100 R2 (20') R4D (48') 10,000 11,000 12,00	tgom	US 11	Radford Rd	Rte 688 (Rock Rd)	(Walton Rd)	1.25	including bike lanes	5,949,100	R2 (36')	R4D (48')	10,420	13,600	16,700
	Moni	Rte 600	Tyler Rd	I-81	Medical Center	0.45	with turn lanes at Rte 627 (Barns Rd) and	1,688.100	R2 (20')	R4D (48')	10.000	11.000	12.000
, 100E) 00		Total					-				-,,,,,,,	,,,,,,	,,,,,,,

² Only thoroughfare roadways with recommendations are shown. For a complete listing of thoroughfare roadways, please refer to the Radford Area including Fairlawn 2020 Transportation Plan Technical Report or the Radford Area including Fairlawn 2020 Transportation Plan website, http://www.vdoturbanplans.com/Radford.htm.

TYPICAL SECTIONS

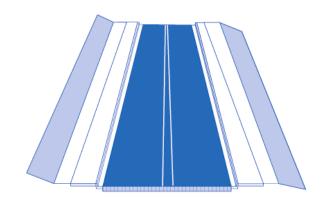
R2

Rural 2-lane roadway with standard shoulders and ditches



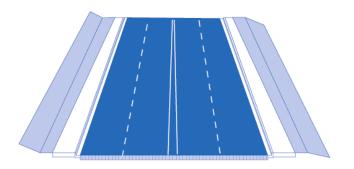
U2

Urban 2-lane roadway with curb and gutter



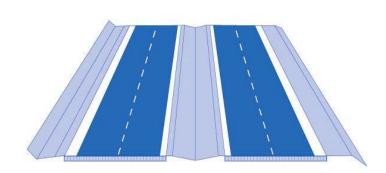
U4

Urban 4-lane roadway with curb and gutter



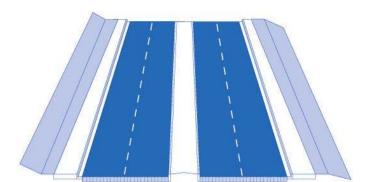
R4D

Rural 4-lane divided roadway with standard shoulders and ditches



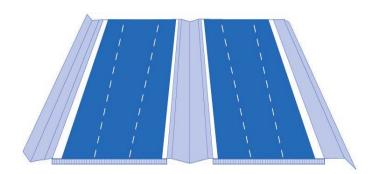
U4D

Urban 4-lane divided roadway with curb and gutter



R6D

Rural 6-lane divided roadway with standard shoulders and ditches



U4F

Urban 4-lane roadway with curb and gutter and flush median (center-turn lane)

